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DATE: February 22, 2012

TO: Kelley Chase, EPA Region 3 OSC
Cynthia Caporale, EPA Region 3 OASQA

THROUGH:

Ex. 4 - CBI

FROM:

SUBJECT: VERIFICATION/COMPLETENESS CHECK – DIMOCK, PA LABORATORY DATA
File 1201015 FINAL PART 1 of 3 R33907 02 15 12 1045.pdf

INTRODUCTION

On February 21, 2012, a review of the case narratives and corresponding certificates of analysis from the EPA R3 (Metals and Glycols Report Posted Feb 15) was conducted at the SERAS facility in accordance with the Follow-Up Verification/Completeness Check agreed upon during our teleconference on Wednesday 2/8/12.

The assumptions for this review include the following: 1) Case narratives from the Regional labs and/or subcontract labs have been reviewed in accordance with Regional or Environmental Services Assessment Team (ESAT) protocols and contain all pertinent and complete information to conduct the completeness check. SERAS will base this review on the information provided by the laboratory and not on an actual data package; and 2) SERAS will relay any “red” flags to the EPA R3 personnel to resolve and determine data usability.

OBSERVATIONS

In accordance with Table 1 – Field and QC Sampling Summary (Rev01 - 2/3/12), Table 2 – Sample Analytical Requirements Summary (Rev01 – 2/3/12), Methods for Groundwater and Surface Water Samples and the R3 SOPs R3QA159-021511 for ICP, R3QA-116-021511 for ICP-MS and ASTM D 7731-11/EPA SW-846 8321 for glycols, the following observations were noted and need to be clarified/resolved.

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1. For glycols, QC samples were reported for Batches BA22902 and BB20201. It is clear that BB20201 prepared on 2/2/12 is associated with samples HW25-P, Hw26-P, HW26, HW35, HW20, HW20-P, HW32, HW32-P, HW33, HW33a-P, HW33b-P, HW29a, HW29, HW52 and FB07. Samples EB01, FB06, HW18, HW18-P and HW13 were prepped on 1/31/12 yet the QC samples were prepped on 1/29/12. Is the prep date of 1/29/12 incorrect or is the wrong set of QC samples reported in the laboratory analytical report?
2. For those samples associated with the QC in Batch BA22902 (contingent upon answer to item #1), 2-methoxyethanol results should be qualified “UJ” based on the 61% recovery of this compound in the LCS.
3. For ICP metals, the sodium matrix spike recovery for Batch BB20205 was 149%, which exceeded the QC range of 70-130%. All detected sodium results in this batch should be qualified estimated “J”. This qualification is based on the assumption that the post spike recovery for this analyte in this sample did not exceed the QC limits. This data is not available in the laboratory analytical report.

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4. Table 1 – Field and QC Sampling Summary lists mercury as a metal of interest. No data are reported for mercury in this file. As relayed during a teleconference on 2/21/12, mercury will be reported separately.
5. The requested RL on the Methods for Surface Waters and Groundwaters lists the RL for Uranium as 10 µg/L. The laboratory reported 1.0 µg/L. As relayed during a teleconference on 2/21/12, the reported RL of 1.0 µg/L is correct. No response is necessary.
6. The following samples had analytes that exceeded the federal maximum contaminant levels (MCLs): Aluminum for HW35 and HW29; iron for HW13, HW13-F and HW35; manganese for HW25-P, HW25-PF, HW26-P, HW26-PF, HW26, HW32-P, HW32-PF and HW32-F; and lead for HW35. It should be noted that several samples were close to their respective MCLs: Arsenic for HW32-PF and HW32-F; and manganese for HW29z.
7. There were several non-typical metals that were detected in some of the drinking water samples for which no MCLs are available: Boron for HW18, HW18-P, HW18-F, HW18-PF, HW25-P, HW25-PF, HW26-P, HW26-PF, HW26, HW26-F, HW29z, HW29z-F, HW29 and HW29-F, strontium for HW18, HW13, HW18-P, HW18-F, HW13-F, HW18-PF, HW25-P, HW25-PF, HW26-P, HW26-PF, HW26, HW26-F, HW32, HW32-P, HW32-PF, HW32-F, HW29z, HW29z-F, HW29, HW29-F, HW52 and HW52-F; uranium for HW18-P, HW18-F, HW13-F and HW18-PF; and lithium for HW29z, HW29z-F, HW29 and HW29-F.
8. It is assumed that all required instrument QC in the method was run and was within the criteria listed in the EPA R3 SOPs since this information is not available in the laboratory report.

cc: Sella Burchette, SERAS Project Officer
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